

Work Order ID 140698

140698

RUSH Ship Friday Page 1

Wednesday, January 13, 2016 4:00:30 PM

Item ID: 650.3913 Accept *N900040100* Setup Start *NS1*
 Revision ID: Stop *NS2*
 Item Name: Doubler Plate
 Start Date: 1/15/2016 Start Qty: 4.00 *4* Cust Item ID:
 Required Date: 1/15/2016 Req'd Qty: 4.00 *4* Customer:
 Reference:

Approvals: Process Plan: MMF. Date: 16-1-17 Tooling: _____ Date: _____
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____
 Run Start *NR1*
 Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
650.3900	B								

100 FLOW WATER JET 0.00
 100
 Waterjet Memo 0.00
 FLOW CNC Waterjet
 1-Cut as per Dwg
 Dwg Rev: B
 Prog Rev: B
 2-Deburr if necessary

110 QC2- Inspect parts off machine FAI/FAIB 0.00
 110
 QC Memo 0.00
 Quality Control

120 QC8- Inspect parts - second check 0.00
 120
 QC Memo 0.00
 Quality Control

DAS
38
9-89
JAN 14 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Description Work Order Deviation				Disposition					

Root Cause			FAULT CATEGORY							
Environment	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐	Power Loss/Surge	☐	Positioned Wrong
Design	☐	Operator	☐	Bending	☐	Set-up	☐	Folio/Program	☐	Outside Dimensions
Doc/Data	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐	Grain	☐	Over/Under tolerance
Equip/Tooling	☐	Supplier	☐	Cracks	☐	Broken/Damage/Defect	☐	Weld	☐	Part Incorrect
Handling/Pre	☐	Training	☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐	Wrong Stock Pulled	☐	Part Lost/Missing
Material	☐	Use for Testing	☐	Cuffs	☐	Contamination	☐	Out of Sequence	☐	Part Moved
Internal Transport	☐	Poor Information	☐	Crushing	☐	Countersink	☐	Off-set	☐	Drawing
Tribal Knowledge	☐	Rushing	☐	Heat Treat	☐	Cut Too Short	☐	Mislabeled	☐	Finish
LOA	☐	Product Improvement	☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐	Fit/Function	☐	Misread
Substation	☐	Process Improvement	☐	Marks/Chatter	☐	Drill Holes	☐	Misaligned/off center	☐	Turning Sequence
* Past Expiry Date	☐	Manufacturing Process	☐	OTHER :						
Misidentified	☐	Past Due	☐							

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Wednesday, January 13, 2016 4:00:30 PM

Item ID: 650.3913 Accept ***N900040100*** Setup Start ***NS1***
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 Start Date: 1/15/2016 Start Qty: 4.00 ***4*** Cust Item ID:
 Required Date: 1/15/2016 Req'd Qty: 4.00 ***4*** Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
140	Chemical Conversion Coat per QSI005 4.1	0.00							
140	HandFinish	Memo				4x	4		16/01/14
Hand Finishing									
150	QC7-Inspect Chemical Conversion Coat	0.00							DAS 41 7-89
150	QC	Memo				4			16-1-14
Quality Control									
160		0.00							DAS 41 9-89
160	SprayPaint	Memo				4			16-1-14
Spray Painting	Prime as per dwg	0.00							
	Primer batch: 132403								

PRIME DEFT. PRINTER
GREEN
16-01-14

mil-PRF-23377J

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : ☐					

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Wednesday, January 13, 2016 4:00:30 PM

Item ID: 650.3913 Accept ***N900040100*** Setup Start ***NS1***
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 Required Date: 1/15/2016 Req'd Qty: 4.00 ***4*** Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
170	QC14- Inspect Spray Paint	0.00							DAS 38 9-88
170									
QC	Memo	0.00							JAN 15 2016
Quality Control									
180	Identify as per dwg & Stock Location: CCK124	0.00							
180									
Packaging	Memo	0.00							68-6 9 DAS
Packaging									JAN 15 2016
190	QC21- Final Inspection - Work Order Release	0.00							
190									
QC	Memo	0.00							MCS JAN 15 2016
Quality Control									

Handwritten signature and date: 16-1-15

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																														
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Misidentified ☐	Past Due ☐																																																																	

Picklist Print

Wednesday, January 13, 2016 4:00:29 PM

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Work Order ID: 140698

140698

Parent Item: 650.3913

650.3913

Parent Item Name: Doubler Plate

Start Date: 1/15/2016

Required Date: 1/15/2016

Start Qty: 4.00

Required Qty: 4.00

Comments: IPP REV:A 16.01.13 NEW ISSUE DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

M2024T3S.080

Purchased

No

sf

131.7362

0.140211

M2024T3S 080

2024-T3 .080 sheet

Dr 16/01/14

Location

Loc Qty

Loc Code

MAT021

131.7362

M127668

7.5

M129584

29

M129891

95.2362

2

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

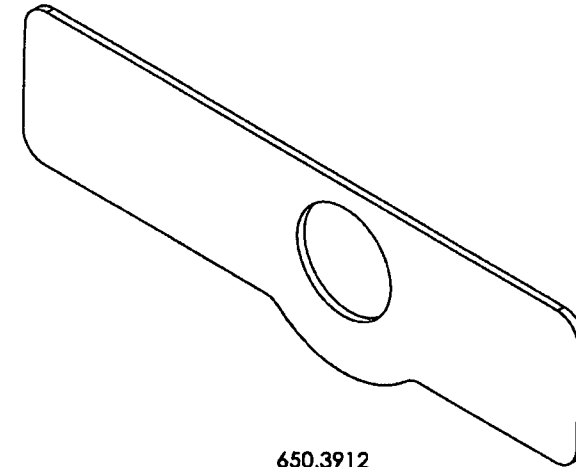
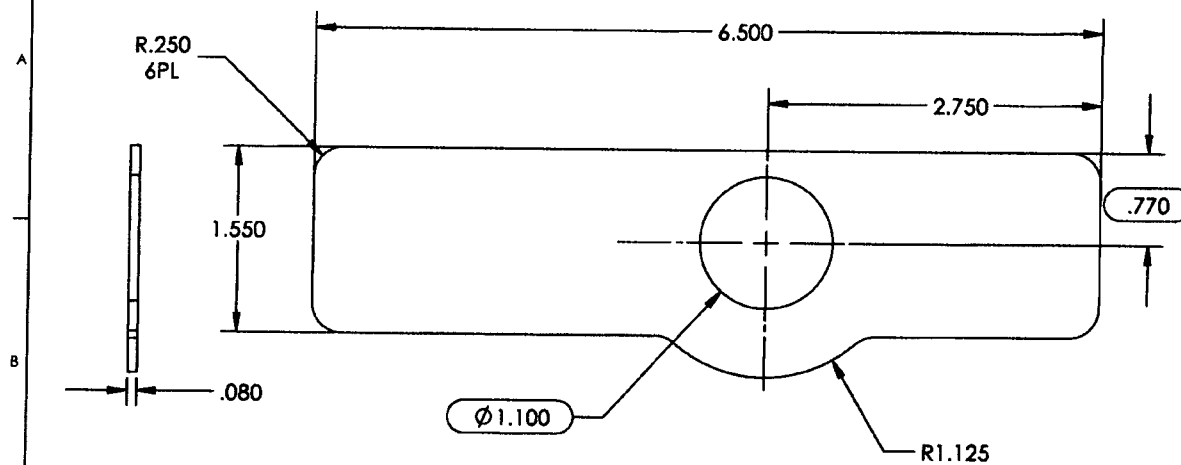
QA Closed: _____ Date: _____

Work Order update only ☐

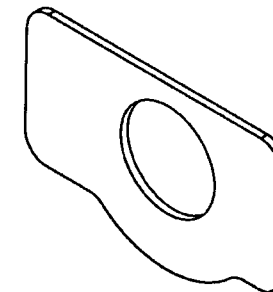
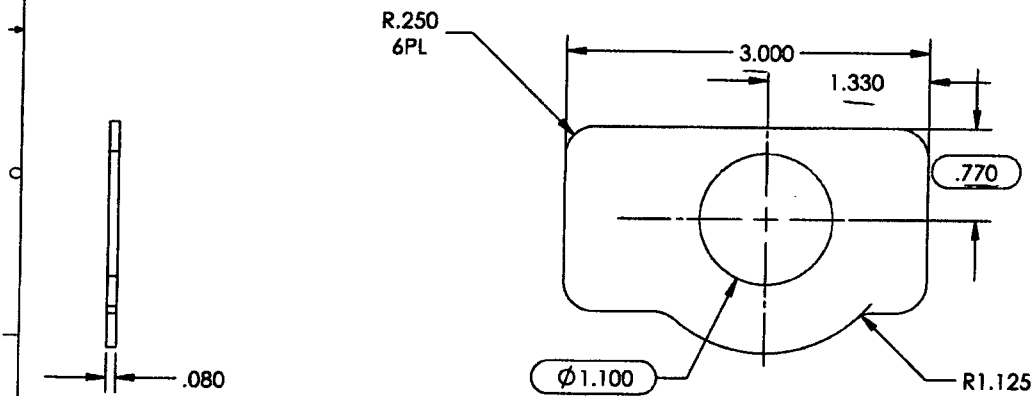
Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					

Root Cause			FAULT CATEGORY							
Environment	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐	Power Loss/Surge	☐	Positioned Wrong
Design	☐	Operator	☐	Bending	☐	Set-up	☐	Folio/Program	☐	Outside Dimensions
Doc/Data	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐	Grain	☐	Over/Under tolerance
Equip/Tooling	☐	Supplier	☐	Cracks	☐	Broken/Damage/Defect	☐	Weld	☐	Part Incorrect
Handling/Pre	☐	Training	☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐	Wrong Stock Pulled	☐	Part Lost/Missing
Material	☐	Use for Testing	☐	Cuffs	☐	Contamination	☐	Out of Sequence	☐	Part Moved
Internal Transport	☐	Poor Information	☐	Crushing	☐	Countersink	☐	Off-set	☐	Drawing
Tribal Knowledge	☐	Rushing	☐	Heat Treat	☐	Cut Too Short	☐	Mislabeled	☐	Finish
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Substation	☐	Process Improvement	☐	Marks/Chatter	☐	Drill Holes	☐	Misaligned/off center	☐	Turning Sequence
Past Expiry Date	☐	Manufacturing Process	☐	OTHER : _____						
Misidentified	☐	Past Due	☐							

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650.3912



650.3913

ORIGINAL DATE 12-03-13		DART AEROSPACE 3030 ENTERPRISE CT., SUITE A VISTA, CA. 92081 (760)-724-5300	
DRAWN BY B. PETERS	CHECKED BY P. BRAVO	APICAL INDUSTRIES, INC. DBA DART AEROSPACE	
DRAWING APPROVAL P. BRAVO 12-03-13		PIVOT STEP DOUBLER	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 3 PLACE DECIMALS ±.01 ANGLES ± .5°		SIZE B	REV. B
CAGI CODE 07M16		DWG. NO. 650.3900	SCALE NONE
SHEET 3 OF 3			

Patrick Smith

From: Jacob Becker
Sent: January-13-16 3:29 PM
To: David Duval
Cc: Jean-Luc Menard; Sian Willems; Patrick Smith
Subject: RE: DXF'S FOR 650.3913 AND 650.3912

For time's sake we will not be able to. Alodine will work for this application.

Jacob

From: David Duval
Sent: Wednesday, January 13, 2016 12:28 PM
To: Jacob Becker <JBecker@dartaero.com>
Cc: Jean-Luc Menard <jmenard@dartaero.com>; Sian Willems <swillems@dartaero.com>; Patrick Smith <psmith@dartaero.com>
Subject: RE: DXF'S FOR 650.3913 AND 650.3912

The dxf's are good. Thanks.

What about the finish, do we anodize and prime the parts?

DAVID DUVAL

Production Engineering Coordinator

From: Jean-Luc Menard
Sent: January-13-16 3:06 PM
To: David Duval <dduval@dartaero.com>
Subject: Fwd: DXF'S FOR 650.3913 AND 650.3912

Sent from my iPhone

Begin forwarded message:

From: Jacob Becker <JBecker@dartaero.com>
Date: January 13, 2016 at 3:02:49 PM GMT-5
To: Sian Willems <swillems@dartaero.com>, Patrick Smith <psmith@dartaero.com>
Cc: Jean-Luc Menard <jmenard@dartaero.com>
Subject: RE: DXF'S FOR 650.3913 AND 650.3912

Let me know if these are good.

Jacob

From: Sian Willems
Sent: Wednesday, January 13, 2016 11:13 AM
To: Patrick Smith <psmith@dartaero.com>

Cc: Jacob Becker <JBecker@dartaero.com>
Subject: FW: DXF'S FOR 650.3913 AND 650.3912

Hi Pat,

The approved dwg calls out anodize but we won't be able to do this in the timeline. How do we handle a deviation from the dwg?

Thanks,
SIAN WILLEMS
Customer Support Manager

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M +1-613-676-0577
F +1-613-632-5146
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